REMARKS

Claims 1-5 and 9-12 remain in this application. Claims 1- 4 and 10 have been amended to better define Applicant's invention. An editorial amendment has been made to claim 12.

Claims 1 and 10 stand rejected over Meisberger ('821) in view of Inokuchi ('960) and Maeda ('099). In these claims, the size of a pixel at the detection of a second electron signal from the substrate is changed. That is, when an image of large area is displayed by selecting a low magnification button, the size of a pixel at the detection of the signal is enlarged, since it is sufficient to have larger pixels in an enlarged image with a rough resolution. However, when a fine image is required by selecting a high magnification button, the size of the pixel at the detection of the signal is reduced to get a high resolution. If the size of the pixel when detecting the signal is not reduced, a fine image cannot be obtained.

With a large area display mode, when the size of pixel at the detection of the signal is enlarged, since the area of one pixel is enlarged, the area to be detected per unit time at the signal detection can be increased. Because of this, the present invention has an advantage that throughput is enhanced.

That the resolution at detection is involved is clear form the specification. In describing Fig. 15, which shows setting the irradiating condition, in paragraph 156 it is described how the pixel size may be set. The statement is made that: "The pixel size denotes a size of pixel of an image which is formed from the signal obtained by the secondary electron detector 35 shown in Fig. 2, namely, a length of one side. A pixel smaller than a beam diameter of the electron beam can be selected. Therefore, even if a width of circuit pattern differs on one chip, the size of pixel can be designated in accordance with the width of the circuit pattern, so that a high efficiency of the inspection time can be realized." Thus, it is the pixel size at the detector that is being set. This is now brought out in the claims.

On the other hand, in the references, what is described is that the size of the pixel of a displayed image is changed. In this case, since the size of the pixel the when detecting a signal is not changed, only the roughness of the displayed image is changed. Accordingly, in the references the advantage that the throughput is enhanced cannot be obtained.

As is clear from the above, as amended, claims 1 and 10 define over this art and should be allowed.

As to the rejection of claims 2 and 3 as obvious over Meisberger, the defect on the circuit pattern is irradiated with a charged particle beam again, *i.e.,* a second time. The second irradiation is performed for the purpose of enabling a detailed observation of the defect. That is, when a signal is detected again by irradiating the defect portion again, the size of the pixel is reduced to increase resolution, so that a fine image of the defect portion is obtained.

On the other hand, in Meisberger, only describes displaying the image of a defect stored in a memory again. In Meisberger, since the re-displayed image is the same image as the image obtained at a detection time, the size of the pixel at the detection of the signal remains unchanged. Accordingly, when the image of the defect is enlarged, since the size of the pixel is unchanged, a rough image with low resolution is displayed.

Nothing in Meisberger discloses or suggests irradiating the defect portion again in order to obtain a fine image. In view of this, clams 2 and 3 also distinguish over the art and are allowable.

Claim 4 is rejected as obvious over Meisberger in view of Todokoro ('245) and Inokuchi. Claim 4 claims "said first and second images being displayed in at least one of different colors and different manners." Because of this, one of the displayed images can be easily discriminated from the other, which is obtained from a different defect extracting apparatus.

This feature is not disclosed or suggested by any of the references. Accordingly, claim 4 should be allowed over the cited art.

Claims 5 and 11 are rejected over Meisberger in view of Todokoro ('245) and Inokuchi. As claimed, a wafer map, an electron beam image of a defect and defect information are simultaneously displayed on a monitor. Because of this, an operator can easily know where the defect is located on the substrate and features of the defect.

On the other hand, in Meisberger, there is no disclosure concerning a monitor. In Inokuchi, a wafer map is disclosed. However, only the wafer map seems to be displayed. In Todokoro, in Figs. 46 and 47, an SEM image and related information are displayed on a monitor. However, in Todokoro, the SEM image is not an image of a defect, but an image of a hole pattern. Accordingly, it is clear that the information does not include information concerning position, size and area of a defect. Thus, Applicants submit that even if it is proper to

combine these references, that combination does not lead to what is claimed in claims 5 and 11 and these claims should also be allowed.

As to the rejection of claims 9 and 12 over Inokuchi in view of Nomoto ('777), in these claims, a mark is established at a location near to the position of the defect. By doing this, when the defect is observed with another inspection apparatus, the defect can be easily found by searching for the mark. Further, since the mark is not established on the defect itself, the defect is not disturbed.

On the other hand, in Inokuchi, alignment marks are used to determine coordinates of a defect on a wafer. When the defect is observed with another inspection apparatus, it is necessary for the inspection apparatus to have the information defining the coordinates of a defect transmitted to it and to search for the defect on the basis of the coordinate information. Accordingly, when the defect is very small, it takes much time to search for and find the defect.

In Nomoto, since a mark is written on the surface-shape defect itself, not near the defect area, the marking disturbs the defect. Accordingly, though the defect position can be found, it is impossible to observe the defect itself after the marking.

Nothing suggests combining these references to reach what is clamed. One would simply use one or the other disclosed methods. Only from Applicants' disclosure does one learn to place a mark near a defect to facilitate later location of the defect with different apparatus. Thus. Claims 9 and 12 also define over the references and should be allowed

In view of the above, all remaining claims are in condition for allowance, prompt notice of which is respectfully solicited.

Applicants respectfully request a one month Extension of Time to respond to the Office Action of February 21, 2003. The extended period expires June 21, 2003 (June 21, 2003 falls on a Saturday).

The Office is hereby authorized to charge the fee of $110.00 for a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) and any additional fees under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayment to Deposit Account No. 11-0600.

Respectfully submitted,

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